

# Home Surveillance Camera Guide

## **Topics covered in this article:**

- Crime trends
- Securing your home
- Cameras as a deterrent
- Exterior camera placement
- Exterior mounting locations
- Remote access
- Storage
- Quality
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There are many options available when choosing a home video surveillance system. Unfortunately there is not a single solution that works for every household. When looking to purchase a home video surveillance system, it is often best to define what you want the system to do and how those needs fit into your budget.

## **Crime Trends**

In order to help determine what features you want from your home video surveillance system lets first look at some crime trends. We will start with the crime of residential burglary.

Based on our data, we have found the following to be true regarding residential burglaries in the City of Fremont:

- Most residential burglaries are committed between the hours of 9am and 4pm.
- Most residential burglary suspects look for homes that are unoccupied. As such, the majority of residential burglary suspects will knock very loudly on the front door to see if anyone is home. Often times, when someone unexpectedly answers the door, they have a very odd or generic excuse for why they are there. Typically they just make up a name and ask if that person lives there.
- Most residential burglary suspects are looking to steal money, gold and small electronics like tablets, laptops, smart phones and money. Many will also steal identifying information and bank documents to be sold to identity thieves.
- Most residential burglary suspects enter the home from an unlocked door or window. The second most common method is to pry or break a door or window.
- Most residential burglary suspects pawn or sell the stolen property immediately after stealing it.

- The majority of residential burglary suspects are from out of town.

With this data in mind, we need to look at ways to both prevent a residential burglary from occurring and, if one does occur, how you can obtain timely suspect information for immediate follow up investigation by the police.

### **Securing your home**

From a prevention aspect, ask yourself a few questions:

- Does your home appear unoccupied on weekdays between the hours of 9am and 4pm?
- Can someone walk up to your home and look through windows and see that no one is home?
- Would it be easy for someone to walk onto your porch and be obstructed from the view of your neighbors?
- Could someone easily enter your backyard and try to open doors or windows without being seen?
- Are your sliding doors and windows locked and if so, do they also have an additional security device (as simple as a wooden stick) that would prevent them from opening if the lock was defeated?
- Have you upgraded your front door and side garage door with a security plate and longer screws so that the door is not as easy to kick open?

Once you have addressed the above prevention concerns, now we can move on to the area of home video surveillance. Home video surveillance systems, when set up properly, can act as both a deterrent and a means to help identify suspects should a crime occur.

### **Cameras as a deterrent**

Video surveillance cameras can act as a deterrent however many criminals have committed their crimes knowing full well they were on video surveillance. Be careful if selecting fake cameras for a deterrent, as many fake cameras can be spotted fairly easily by people that know better. Ultimately your goal is to make your home appear less attractive to a burglar than others.

### **Exterior Camera placement**

Camera placement should be given a lot of consideration. If you are setting up a video surveillance system that is being actively monitored (typical commercial design), then having a wide field of view by mounting cameras up high, the system can alert you to the presence of an intruder. This provides you time to mitigate the event. If, however, you are a typical homeowner that will only occasionally view their surveillance live, with most review coming post event, then you want to focus your video on key points of entry

or concern. This will allow you to identify any subjects that may have committed a crime. In a perfect world you would do both, high mounted overview cameras and low mounted recognition cameras, but that can get expensive.

### **Exterior Mounting Locations**

Front porch: This location is of high importance due to what we know about the crime trends of residential burglaries. Specifically that most residential burglary suspects will knock on the front door before attempting to break into the house. Mounting a camera near the front door at head height, allows for the best possible chance to identify a suspect after the fact. This location will typically require an outdoor rated camera and should also be vandal resistant. Purchasing a camera with IR lights built in will provide additional detail when it's dark outside.

Rear Entrance: This is one of the first places a residential burglary suspect will check once they go into your backyard. It is another good place to have a camera installed. This location can be monitored from an exterior camera that can also allow a wider field of view of your backyard or an interior camera facing the rear door.

Side gate: This is typically the way a suspect will get into your backyard. Having the gate locked is a good first step, however it may not be enough. This location is of lower importance, but is a good access control point in overall security.

Driveway: This location serves to primarily to watch over your vehicles, thus the mounting location is typically a higher allowing for a full view of the driveway over the top of vehicles.

Street View: This mounting location is typically on the front of the house with the camera facing the street. This location provides a significant benefit to the neighborhood as a whole, especially when multiple residents are willing to do it. Having cameras facing the street can help obtain suspect vehicle descriptions and possibly license plates, in addition to recording suspect vehicle movement throughout the neighborhood. Due to distance and lighting conditions at night, this is typically your highest quality camera, however can be one of the most important from an investigative standpoint.

Mounting cameras up high covers more ground but will typically not be optimal to see a suspect's face. Mounting the wrong type of cameras too low will leave them susceptible to theft. Vandal resistant exterior wall mounted cameras can be purchased that allow them to be mounted head high and thus allowing for a clear view of the suspects face. This is a good solution for a front porch should a suspect come up to the front door to knock before committing a crime.

Here is an example of an exterior vandal resistant video surveillance camera.



**Remote access:** Many home video surveillance systems have been designed to be compatible with smart phones and tablets. Not only does having remote access allow you to check on your home when you are away, but it also allows motion and sound alerts to be sent to your device. Depending on your camera locations, alerts can be set up to notify you when someone is at your front door or when someone has entered your house. Keep in mind that many factors can affect the quality of alerts you get, such as pets that stay indoors, shadows in the house as the sun moves, residents coming and going during the day etc.

**Storage:** There are many different storage options available for the various home video surveillance systems. When it comes to storage, the bare minimum should be 24 hours. The recommended length of storage would be the typical length of time of your vacations or trips away from home. For most people, one to two weeks of storage will suffice. The more cameras you have and the higher quality video they record, the more storage you will need.

Estimated storage can be determined with a simple online search for a NVR (Network Video Recorder) Storage Calculator. There are several variables that come into play such as compression, resolution, frame rate, number of cameras, continuous video vs motion activated and desired number of days of storage.

**Quality:** Cameras suitable for home surveillance can come in a wide variety of image resolution. As a general rule of thumb you should start at 720p and work up from there. Note that just because a camera has a higher resolution does not mean it will work better in a given location under specific lighting conditions. Also note that the higher you go in resolution, it will also require more storage space.

**Cost:** A home surveillance system can range from a single camera, that believe it or not can be free of cost, to the ballpark of \$10,000 for high end equipment and multiple cameras. Free you said? Yes, if you have an old smart phone, you can download an

app that will turn your old phone into a makeshift video surveillance camera with motion alerts via Wifi. The phone will appear to be off, however the app is running in the background. You can leave the phone plugged in and it will alert you to movement and record video inside your home. More than one burglar has been caught this way.

**Privacy:** Personal home surveillance cameras can be mounted on your property and can face both your own property and towards a public place. Cameras should not be viewing or recording someone else's private property that is not visible to the general public. Examples would be a neighbor's backyard or zoomed into a neighbor's window. Audio recording is a typical feature of many home surveillance cameras. Audio recording can occur on your own property, however should be avoided in a public place where any person has a reasonable expectation of privacy.

**Using City property to mount cameras or supply power:** This is problematic and has not been previously approved. You must find ways to use your own property or work together as a community to install cameras in strategic locations in your community.